

**Notice of Allowability**

Application No.

09/936,164

Examiner

Jerry A. Lorengo

Applicant(s)

HIGASHIDA ET AL.

Art Unit

1734

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/05/2004.
2. ☒ The allowed claim(s) is/are 41-57.
3. ☒ The drawings filed on 10 September 2001 and 05 November 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)           |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|   | 9. <input type="checkbox"/> Other _____   |

## **DETAILED ACTION**

(1)

### ***Specification***

The substitute specification filed November 5, 2004 is acknowledged and has been entered into the file.

(2)

### ***Drawings***

The drawings (Figures 8 and 9) were received on November 5, 2004. These drawings are approved and have been entered into the file.

(3)

### ***Allowable Subject Matter***

Claims 41-57 have been found to be allowable over the prior art of record.

(4)

The following is an examiner's statement of reasons for allowance:

Methods for the formation of optical disks by injection molding and their removal from the molding apparatus, such as taught by U.S. Patent Nos. 6,164,955 to Kubota; 5,882,700 to Asai; 5,376,317 to Maus et al.; 5,316,466 to Tanaka et al.; 5,297,951 to Asai; and 4,783,041 to Sakaida et al., are known in the art. Japanese Patent Nos. 08-207161 ; 06-31782 ; and 02-147221 also disclose such methods. U.S. Patent No. 5,882,700 to Asai, for example, discloses an optical disc ejecting method in an optical disc molding process comprising the steps of: Opening the molds so as to initiate the separation of the stamper and the molded disc substrate from a mold clamp (closed) state; supplying air in the space between the non-data carrying (non-form face) surface of the molded disc substrate and the outer mold surface of mold half via an air passage such that the molded disc substrate is effectively removed from the mold half while it is held on the surface of the stamper; and creating a gap between the stamper held on the surface of the mold half and the molded disc substrate via an ejector sleeve and injecting pressurized air supplied via an air passage between the stamper and the molded disc substrate to remove the disc substrate from the mold half. It is generally known, as taught by Moynagh, that optical disk stampers (masters) typically have a thickness of 0.3mm.

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Although JP 02-147221 to Tanaka, also drawn to optical disc ejecting methods in an optical disc molding process, disclose that after molding, the mold halves are moved apart and an ejector sleeve is advanced and protruded from the mold half which supports the stamper by a distance of 0.1 to 0.3 mm, none of the prior art of record specifically teaches or suggests the method as set forth in applicant claim 41 wherein the mold opening and disc ejecting steps are accomplished by a step-wise opening of the molds wherein the molds are opened to a first distance, followed by a first air injection step, followed by a second mold opening, which is concluded by a second air injection step and wherein the sum of the first and second distances formed by the mold opening are about 0.3 mm.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

(5)

***Response to Amendments and Arguments***

The amendments and arguments filed November 5, 2004 are acknowledged. Specifically, the substitute specification and substitute drawings filed concurrently therewith are acknowledged and have been entered into the file as set forth in sections (1) and (2), above. In response to the amendments to the claims (comprising new claims 41-57), wherein the invention has been more specifically defined over that of the prior art of record, claims 41-57 have been passed to issue as set forth and explained in sections (3) and (4), above.

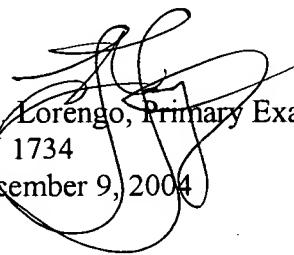
(6)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry A. Lorengo whose telephone number is (571) 272-1233. The examiner can normally be reached on Monday through Friday, 8:30 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



J.A. Lorengo, Primary Examiner  
AU 1734  
December 9, 2004